Argumentation in Artificial Intelligence
PhD School in Computer Science and Engineering, University of Bologna

Instructor
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Registration
No registration required. The course is open to all interested

Organization
5 online lectures, each Tuesday at 3.30 pm starting April 27, 2021

Syllabus
- 27 April: Introduction to computational argumentation
- 4 May: Representing and reasoning about arguments
- 11 May: Abstract argumentation: a conflict calculus
- 18 May: Natural arguments and where to find them
- 25 May: Language technologies for argument mining

Location
Online via Teams at the following link [or Zoom **only if** Teams has problems: alternative link]

Teaching material
Course slides will be made available via Teams. They include links to relevant literature

Evaluation
Discussion of candidate's own paper or literature paper, on a relevant topic

Prerequisites
No prerequisites

Overview
Argumentation studies how assertions are proposed, discussed, and resolved in the context of issues upon which several diverging opinions may be held. This is relevant to many disciplines, such as logic, philosophy, language and rhetoric, psychology, sociology, law, communication studies, an many more. In recent decades, computational argumentation has become a focus of interest in artificial intelligence, as it was recognized as a powerful paradigm for representing knowledge, operationalizing formal reasoning, framing multi-agent dialogues, and help conflict-resolution and decision-making. More recently, such an interest has expanded with the introduction of new applications of computational argumentation, and the increasingly important contribution of language technologies for the automated analysis and generation of natural arguments. This series of lectures aims to introduce the audience to this lively area, provide a broad overview of paradigms and methods, and illustrate applications in the context of explainable AI and argument mining.